

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
7 July 2005 (07.07.2005)

PCT

(10) International Publication Number
WO 2005/062552 A1

(51) International Patent Classification⁷: **H04L 12/56**

Tokyo 155-0033 (JP). URABE, Kenzo [JP/JP]; 38-3-606 Mori-no-dai, Midori-ku, Yokohama, Kanagawa 226-0029 (JP). ODA, Toshikane [JP/JP]; 3-8-19 Hiroo, Shibuya-ku, Tokyo 150-0012 (JP).

(21) International Application Number:

PCT/SE2003/002074

(22) International Filing Date:
23 December 2003 (23.12.2003)

(74) Agent: VALEA AB; Lindholmspiren 5, v n 6, S-417 56 G teborg (SE).

(25) Filing Language: English

(81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE, EG, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(26) Publication Language: English

(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

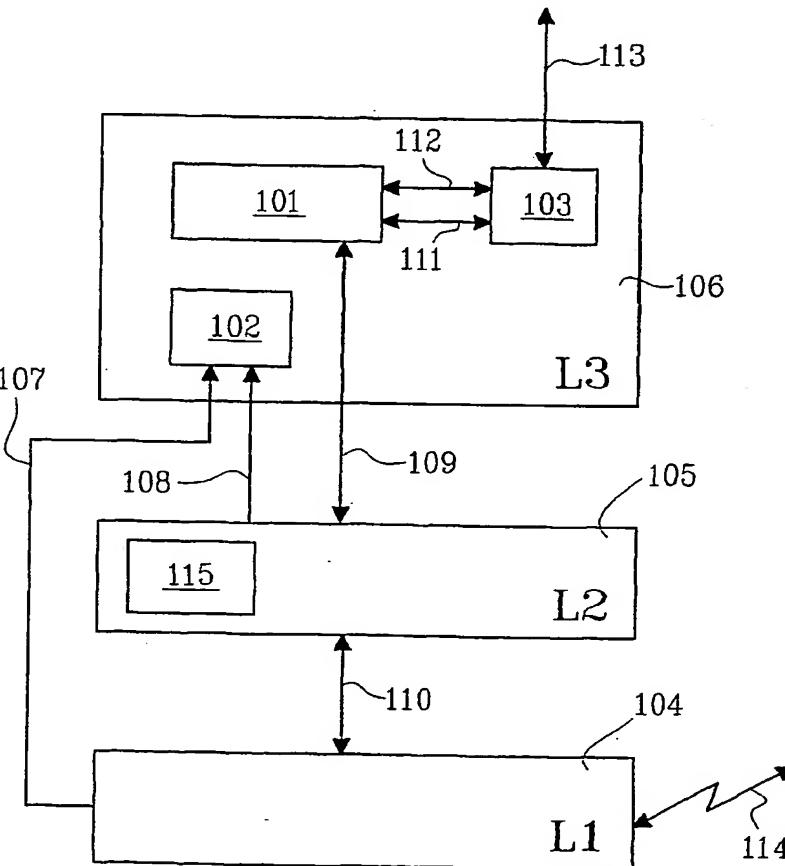
(71) Applicant (for all designated States except US): TELEFONAKTIEBOLAGET LM ERICSSON (publ) [SE/SE]; S-164 83 Stockholm (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): AXELSSON, Leif [SE/SE]; Askims H galid 20, S-436 51 Hov s (SE). HONDA, Yoshio [JP/JP]; 3-32-12-206 Daita Setagaya-ku,

[Continued on next page]

(54) Title: PREDICTIVE AD-HOC



(57) Abstract: The present invention relates to a system for efficient routing in a multiple hop wireless communication network comprising a plurality of network nodes is presented. The system comprises means (3001) for acquiring quality information indicating link status between said infrastructure nodes, means (3002) for using said link quality information in a route determination process in the infrastructure nodes using a predictive procedure, said link quality information containing information about a time varying information of said link status; and said predictive procedure uses said time varying information of link status in the predictive procedure; and routing means (101) for routing data packets according to a determined route.



Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*